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ABSTRACT

Information professionals have been concerned with information sharing and cooperative arrangements for years; however, members of other professions, trapped in their own institutional and information maze, are building their own interpersonal and interagency networks. By developing a supportive network of people from various social areas (aging, community health, housing, etc.), the improved interagency communication would facilitate planning and program development, thus improving service to individuals. Two research projects at Syracuse University are currently examining these issues. The Gerontological Information Program (GRIP) and the Health Information Sharing Project (HISP) are seeking to better understand the role of human resource networks in interdisciplinary fields. GRIP will design a centralized information system which will collect research results and other information produced by governments, the private sector, and international organizations, and make them available to service organizations. HISP will develop a decentralized information system which will facilitate the sharing of locally produced studies, surveys, reports, and data files related to health planning, program development, and research. (Author/JAB)

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HUMAN RESOURCE NETWORKS IN COMMUNITY
GERONTOLOGICAL AND HEALTH INFORMATION

Alberta L. Brown Lecture in Special Librarianship
School of Librarianship, Western Michigan University

May 12, 1977

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"We are all 'experts' in something with a rather good feel for the information we need and how to obtain it within the fields of our own expertise. But we are overwhelmed with information requirements and irrelevant information even as experts. And we are all 'babes in the information wilderness' with regard to all the other important aspects of our lives."

Andrew E. Wessel: The Social Use of Information -
Ownership and Access. New York, N.Y.: Wiley, 1976

As more emphasis is put by the nation on improving the quality and availability of services in a community, the institutional structures of research and service delivery become more complex and possibly more fragmented. Both the users and the providers of services are caught up in the growing complexity, which is further aggravated by communication and information problems. An individual who is looking for a solution to a personal problem, and a staff member of a social agency who is stymied by too much information and not enough relevant and specific data, are both victims of an information trap. An information trap will not kill you. It just prevents you from moving.

Information professionals who are affiliated with industry, local government, research institutes, academic or public libraries, or any kind of community-based agency have been concerned with information sharing and cooperative arrangements for years. Members of other professions, trapped in their own institutional and information maze, are building their own interpersonal and interagency networks.

Would it be possible, then, by developing within each social issue area (aging, community health, housing, transportation, etc.), a supportive network of people for interdisciplinary information sharing among various community organizations that we could improve overall communication? We believe that better communication among agencies and institutions would facilitate planning and program development thus improving the service to individuals.

These are the issues currently being examined by two community-oriented research projects at Syracuse University. The Gerontological Information Program (GRIP) and the Health Information Sharing Project (HISP), funded by the Administration on Aging and the National Library of Medicine, respectively, are seeking to better understand the role of human resource networks in interdisciplinary fields. Both are concerned with the utilization of research by service providers.

GRIP has been established to design and assess a prototype centralized information program to disseminate gerontological information to service delivery agencies in the community. The program will collect research results and other information produced by governments, the private sector and international governmental and non-governmental organizations, and make them available to service providers. Effectiveness of the service will be evaluated on the basis of feedback from the agencies. (Figure 1)

HISP is developing a prototype decentralized information sharing mechanism for organizations and individuals in community health planning and care delivery. The project will facilitate the sharing of locally produced studies, surveys, reports, and data files related to health planning, program development and research. (Figure 2) A field experiment will evaluate its effectiveness. The background, conceptual development and goals of these research projects form the topics of my lecture.

Information Sharing Across Disciplines and Professionals

"The future", said E.T. Hall in Beyond Culture, "depends on man's transcending the limits of individual cultures." I would like to contemplate for a few moments the implications of these words for our topic.

Culture has been sometimes defined as "those selective ways of feeling, thinking, and reacting that distinguish one group from another - ways that are socially transmitted and learned." (1) The concept is usually applied to national and tribal groups or followers of a social movement, an ethnic neighborhood or a religious sect, whose members share the values and symbols of a common social heritage and learning. It has been suggested by sociologists of professions that the concept of a shared culture may be applied to members of a profession. (2) Members of a group within a profession, such as special librarians have even closer ties with each other. They have their own journals, conferences, criteria for standards of practice, concerns and terminology. They have their own sets of individuals within the group who correspond, seek out each other at meetings and generally exchange ideas and interests. Members of such human networks have been sharing information through informal channels for years.

Traditionally, information sharing among individuals has taken place in a specialized field where members of a group develop natural ties based on a common "culture". It is only recently that we are beginning to perceive the need to exchange information (and to understand each other's attitudes, symbols and use of terminology) across disciplines and professional boundaries. In this light, E.T. Hall's words would mean that the future of the information profession depends on our ability to transcend the limits of our own groups and communicate with members of other professions. We may or may not agree with this premise, but we should reflect upon it.

Centralized and Decentralized Information Sharing

A few definitions will be helpful in order to outline our topics. We will define a "network" as the way of sharing information resources, and linking the members and the information products of different systems and organizations,.

A network of resource people, interconnected by formal or informal communication channels, may come from very different backgrounds. Interdisciplinary cooperation often emerges around a social or environmental issue that needs the problem-solving ability of various professions and disciplines. Issues of problem-focused areas, as distinguished from narrow fields of specialization, are sometimes hard to define. Crane, author of Invisible Colleges: Diffusion of Knowledge in Scientific Communities,

observed that "scientific fields can be defined as broadly as a discipline or as narrowly as a problem area (a cluster of closely related problems)."

(3) This has implications for community-wide information sharing. For instance, a hospital social worker may work closely with area nursing homes and thus develop a certain expertise. The same person may be called upon to join a committee which is working on a hypertension prevention program. Soon a new area of insight and experience will emerge, this time relating to hypertension. However, most people will be aware of only the primary field of expertise. The social worker's very individualized experience with the hypertension program might not be fully utilized by others in the community who are concerned with the same issue.

A "human resource network" in this context, means the mode of sharing the knowledge (and often the information resources) of people who are informed within a field, whether this field is their primary area of specialization or an additional experience or skill. Depending on one's priorities, available time, occupational or personal constraints, and threshold for intensive interaction with people, the same individual can participate in more than one "network".

The term "information sharing" as used by the Syracuse projects, means the process by which individuals and organizations become information resources. One may turn to a personal resource in search of various types of information-related assistance: Information giving (you call that social worker because you want to know how many nursing homes in the area run a bus service for their residents), referral (you ask that social worker where you would write or call for statistics showing the evidence of hypertension in various population groups), information look-up (you call the social worker to ask to consult a directory of nursing homes in his/her office), and document loan (you ask for a journal issue because the social worker's office is closer and more convenient to you than the library).

Arrangements for information sharing may be formal (staff meetings, regional meetings, access to an information and referral center, an information clearinghouse, workshops and symposia, organizational membership arrangements, etc.), or informal (based on shared experience, professional background, trust, respect, habit, considerations of prestige or status, political strategy, etc.).

Informal information resource sharing is an extremely complicated social process because its effectiveness is contingent upon a number of behavioral, psychological and environmental variables. Not only the process of information seeking and giving depends on personal priorities and circumstances, but also some information products (field observations, lecture notes, program plans, internal memoranda, policy statements, personal data files, clipping files, etc.). These are typically available through informal channels rather than formal library and information services. Further research will be needed before the role, usefulness and social cost of such personal information resources will be better understood. Motives and constraints that govern the production and sharing of such resources indicate the difficulty of objectively assessing them. (4)

Research in the 1960's, Implementation in the 1970's

The literature search that preceded the Syracuse projects explored (a) the boundaries of formal information services to the gerontological and the health care sectors, including health libraries, information and referral services (I&R), and management information systems (MIS), (b) the use of personal collections and data files, (c) evidence of informal social groups for information exchange, for instance the "invisible colleges", and (d) the role of the "gatekeeper" as an informal information processor in an organization.

The informal communication networks of scientists have been studied and reported on in a significant body of literature. Historically, two major trends may be distinguished:

First, in the 1960's, research concentrated on the informal social structure of the scientific community. Studies have shown that interpersonal networks of individuals developed especially in rapidly growing scien-

tific areas. It was found that the characteristics and behavior of such groups had implications for understanding how scientists utilize information, and thus lead to more insights into the scientific research process.

A number of disciplines became interested in the role of informal information exchange. Research demonstrated, for instance, that a professional's location in the communication network was one of the factors that affected the speed with which innovations were adopted among the public health professionals. (5) The American Psychological Association's Project on Scientific Information Exchange in Psychology examined the role of person-to-person communication channels within the larger system of information dissemination in psychology. Other research programs, now well known in the information community, come to mind: INFROSS (Investigation into Information Requirements of the Social Sciences) at Bath University, England; the John Hopkins Center for Research in Scientific Communication and its reports on informal communications at scientific meetings; the studies carried out by Paisley and Parker at the Stanford Institute for Communication Research and by Menzel at Columbia; the DOD User by the Auerbach Corporation and North American Aviation, and many others. By the end of the 1960's most national governments in industrialized countries, as well as UNESCO, OECD and other intergovernmental organizations concerned with R/D policies, recognized the role of informal modes of information exchange.

Secondly, a trend toward systematic utilization of "informal" communication networks emerged in the early 1970's. Several organizations responsible for the dissemination of research information began to develop directories of resource persons to whom queries of a highly specialized or complex nature could be directed. In many cases, these directories represented an almost paradoxical approach: the "formalization" of an already existing informal

human resource network. Of course, one must remember that the size, the boundaries, the composition and the level of activity of an informal group can never be really known without systematic data collection. Even that approach has its limitations. (6) In the case of an informal group, we can never speak of "members", because there is no member registry or any other pool of information, only the fragile testimonies of citations, bibliographies, and attendance lists at small, specialized meetings. Local informal networks are even more elusive, because not everybody who "belongs" has publications which may be cited by others.

There are numerous examples for human resource directories at the international, national and local levels. The Knowledge Source Index, constructed by a pilot project of the Canada Institute for Scientific and Technical Information (CISTI), was one of the first ones. Many intergovernmental organizations (IGO's) and international non-governmental organizations (NGO's) maintain lists of consultants and advisors. Others, such as the United Nations Environmental Programme (UNEP) with headquarters in Nairobi, Kenya, are experimenting with referral schemes. In each participating country, the national focal point of UNEP is responsible for inventorying environmental information resources. Methodologies vary; some focal points intend to or already include names of experts as resource people. In the United States, national "clearinghouses" of information in special problem areas (alcoholism, drug abuse, etc.) have burgeoned in recent years with the help of HEW funding. Examples include Project SHARE, a clearinghouse for information on human services, and the Federal Community Education Clearinghouse. Some of these introduced devices such as bulletins, referral centers and directories of

on-going projects and programs, with names of contact persons. One can only speculate at the diversity and use of human resource files for decentralized use at the local level. Two examples are World food: A directory of educational resources at Cornell University, and Human resources in gerontology at Syracuse University, both constructed within the last two years.

In England, the proliferation of such directories was acknowledged by the British government's Office for Scientific and Technical Information (OSTI) when it funded a survey of expertise indexes, identified as "indexes to persons and their special knowledge of skills."

Although more and more "human resources" directories and "expertise indexes" appear, one has very little understanding of how such networks of people actually function. Is informality their main strength or fallacy? Would more structure destroy their spontaneity and potency as a communication medium? Should they be left alone or should they be studied, documented, even semi-formalized? Can measurements be developed to assess their effectiveness? Do they have potential as an extension of traditional library services?

Several models of resource directories exist and one has to carefully distinguish between (a) directories distributed to participants and utilized by a decentralized network of people and (b) centralized directory files. Kochen described a directory for the use of referential consultants, who were associated with information and referral centers. A computer program for the analysis and design of such a directory was developed. The output of the program included the cost of information giving, the chain of referential consultants and the document used to provide the answer. (7) White discussed the desirable feature of such a directory as "administrative publicity". The directory included "brief, current characterizations of

public services at all governmental levels..." (8) BenDor reported on the Community Resource-Sharing Information System (CRIS), an experimental data bank which provides a description of potentially useful services in the community. The report discussed private information ("an automated grape-vine" of comments about the services) as a controversial and still undeveloped feature of the system. (9) Other examples could be drawn from the literature of public administration, social work, and urban studies. In all of these we were mainly interested in the role of contact persons.

We saw these two successive trends - first the intensive research of the 1960's on modes of informal information exchange, and then the growing practice of the 1970's to impose some structure upon personal information sources - as leading to new research efforts which would investigate the process of "formalization", and its impact on the availability of information. For instance, the Canadian government contracted with the Data Clearing House for the Social Sciences, for the project CANDATA. The project is developing, evaluating and documenting the cooperative network of CANDATA information users and providers, and is maintaining the Social Science data inventory. (10)

Research on Informal Information Sources and Networks

There has been substantial research focusing on three phenomena related to the informal exchange of information among individuals: (1) the use of personal collections and data files, (2) the "invisible college" and other social groups, and (3) the information "gatekeeper".

The literature of physical accessibility (the ease with which information may be located at a near-by place) and personal collections had been reviewed by Soper. (11) In her dissertation, the same author investigated

the effect that the availability of personal collections has on the selection of cited references by authors. (12) She concluded that propinquity is a predictor of the use of information resources and that information close to the user, such as personal collection in the home or office, will be more readily used than formal services of libraries.

More recently at Case Western Reserve University, an interdisciplinary team associated with project INFUT (Information Utility) studied the use of private collections of faculty members. These personal collections were found to be an important resource. The team cautioned that the existence of the resource "must be called fragile for great increases in usage... Its usefulness lies in its lack of structure." (13) Similar findings were reported by another INFUT study that examined the potential uses of informal communication patterns; "... although formal analogues may be created to satisfy the goals of information sources and destinations, and to provide the benefits of informal channels, it might be only the informal nature which is responsible for the success of informal communication." (14)

Jahoda, Hutchings and Galford studied the ways university faculty members indexed their private collections. (15) Several sources in the literature dealt with the use of computers for personal file control and retrieval. The implications of computerized personal information systems for libraries were examined by Burton in 1973, concluding that "personal information systems are one of the richest sources existing for studying user needs and behavior." (16) From the numerous monographs and papers written on bibliographic and numerical data retrieval systems, at least two emphasized personalized systems. In 1970, Jahoda discussed methods for the bibliographic organization of personal document collections of individual researchers. (17) Five years later, Mittman and Borman published a

discussion of RIQS (Remote Information Query System) followed by seventeen case studies demonstrating the uses of the system for both bibliographic and numerical data retrieval by researchers in a number of social, administrative and medical sciences. (18) It is interesting to reflect on the impact that the popular acceptance of the personal use of computers by individuals might have on wide-spread information resource sharing.

"The invisible college", a designation that caught the imagination of many authors, has been profusely used in the literature and often misinterpreted. De Solla Price, who had rediscovered the term and popularized it in 1963 in Little Science, Big Science, felt compelled to define it again and again. Eight years later, he wrote that invisible colleges "are not just groups of people working on a similar field of science and communicating amongst themselves in some informal fashion behind the backs of the conventional journals. Invisible colleges are not power groups in essence... They are just the hierarchial elite resulting from an expectable inequality..." (19) In spite of this notion of exclusivity, many authors use the term as a label for any social network or cooperative group of experts.

Crane brought critical thinking to the study of inter-personal information sharing, warning that "the existence of the invisible college has been difficult to prove..." She added new aspects to the analysis of interpersonal exchanges in groups: (a) interaction between pioneering innovators (elites) and early adaptors, and (b) exchanges between the innovators and outsiders. (20) In "Transnational networks in basic science", Crane reported on a study of the interaction between scientists, administrators and politicians. Her paper offers insights on the role of individual scientists, non-governmental organizations (NGO's), inter-governmental organizations (IGO's) and national governments in cross-national cooperation in scientific research. (21)

Crawford mapped international contacts between researchers in an interdisciplinary area, sleep research. She found that there was a core group of high producers (the elite?) whom others used as information resources. (22) Zaltman, using sociometric techniques, identified an interactive, international group in high energy physics. He noted that the function of the invisible college was not only to provide informal channels of communication, but also to serve as a mechanism to coordinate allocations of resources. He found evidence for the existence of intermediaries in information transfer who performed a gatekeeping or linkage function. (23)

The connotation of the "gatekeeper" in the literature is less elitist than that of the "invisible college". The "gatekeeper" is a relayer of messages among his colleagues as well as between members of his organization and outside information sources. The findings of Allen, Piepmeier and Cooney challenged the notion that contacts of technical staff members of an organization with outsiders would be very effective information carriers. "There is only one information source where use has consistently shown a positive correlation with technical performance... Certain colleagues of the information seeker within his own organization prove to be the most effective direct source of information." Very different from the selective formation of the invisible college is the organization-wide networking of gatekeepers. "In at least some organizations, gatekeepers have actually developed a network among themselves to extend considerably the range between organization members and sources of information in the world at large." (24)

Cooney and Allen extended the gatekeeper approach from the model of the firm to the study of technology transfer in a small country. Their conclusion that the interpersonal information exchange among scientists could be managed opened up a whole new area of potential exploration. (25)

A search through inventories of recent and current research identified a strong interest in research utilization techniques. One finds growing emphasis on the transfer of research results to decision makers and practitioners in human service delivery. The Massachusetts Rehabilitation Commission, for instance, provided the environment for a project that tested the value of the "research utilization specialist" (RUS) as a linking agent between research information and practitioners. (26) To facilitate the interchange and application of current human service research in New York City, the Community Council of Greater New York has been publishing the periodic Research utilization inventory - a survey of current research. Topics range from "abortion", "accountability" and "adolescents", to "transportation", "unemployment compensation", "welfare" and "women". In addition to project abstracts, budget and funding source information, methodology and contact persons, many of the entries included a summary of program and policy implications of the research. (27) A comprehensive state-of-the-art report and bibliography on research utilization was provided by Havelock. (28)

The literature supported our notion that the "invisible college" concept would have only indirect and limited relevance for our projects. The directory of Human Resources in Gerontology at Syracuse University was developed by a systematic survey of departments and schools, rather than by a mapping of interpersonal links. The "interest profile" of each individual was based on a personally administered instrument. Each participant expressed willingness to share information, if called upon, with the others. "Sharing" was defined as the direct exchange of specialized knowledge, information sources and data not currently available through libraries and other formal systems. In the next phase of the Gerontological Information Program, we plan to include in this expertise pool individuals from the community.

The local, service-oriented group of professionals bear little resemblance to the original concept of an invisible college.

The "gatekeeper" program seemed meaningful for our purpose, because we had decided to test a similar approach as part of the Health Information Sharing Project. We were especially interested in current work being done at the Alfred P. Sloan School of Management at the Massachusetts Institute of Technology. The project is a "further exploration of the gatekeeper notion" as it studies the flow of communication and its relation to project performance in two research and development laboratories. (29)

Two more authors should be included here because their work had implications for our research planning, although they had not touched upon the gatekeeper phenomenon. O'Brien's work on the Human Services Design Laboratory of Case Western Reserve University focused on the role of information services as "decision support systems" (DSS), carefully distinguished from traditional management information systems (MIS). Although he did not refer to the gatekeeper function, O'Brien described information overload, one of the problems which led many information seekers to turn to gatekeepers and other human information resources. "The decision maker may ask what seems to him a straightforward question and be inundated with reams of print-out which go into detail on the life history of the question he asked, and of those persons who have asked the question before him. What is missing is an appropriate meshing of the output of information systems with decision-linked inquiry." (30) The capabilities and inadequacies of information systems for organizational decision making were studied by Holland, at Case Western Reserve. Especially relevant to our research questions was his emphasis on "developing the existing informal information handling procedures and strengthening the organization's decision making process."

The Gerontological Information Program (GRIP)

This two-year project, jointly established by the All-University Gerontology Center and the School of Information Studies under AOA sponsorship, grew out of the idea that an information program designed to support social, health, and other services to older people will ultimately benefit the individual recipient of these services. GRIP is not an "Information and Referral" Center (I&R). I&R services which help individuals to find the specific social, health and other resources they need, have been developed by the human service sector itself. We did not intend to duplicate an effort which has been a long-standing tradition to assist service providers and organizations who work with the elderly. (32)

The program's objective is to facilitate research utilization. A prototype service is being developed to accomplish this in two ways: GRIP will provide information support to the academic community where gerontology-related teaching and research is being carried out (for instance in the Maxwell Policy Center on Aging). Simultaneously, the project will collect information on interdisciplinary research from Syracuse University and elsewhere, and disseminate it to community agencies and groups whose work directly affects the lives of the elderly. (Figure 3)

The initial phase included a comprehensive literature search on research on aging, multidisciplinary gerontology centers, community programs, lifelong learning, and information and library service. At the same time, we began a study of information needs of community agencies serving the elderly. A structured questionnaire and personal interviews were used with agency personnel. Initially, 115 such agency programs were identified and sampled. Sixty-five administrators and service providers were interviewed

to obtain complete questionnaires from 9 practitioners in geriatric centers, 21 in senior citizen groups, 26 in specific services, and 9 in umbrella agencies including the area agency on aging. Based on the analysis of data in these questionnaires, profiles of agencies are being constructed showing types of agencies, types of personnel and types of information resources needed by the personnel.

To meet these needs, GRIP is developing a prototype centralized information system. Sources from a number of disciplines and professional fields are being included, because information is needed in health, housing, mental health, recreation, transportation and other issues. The system will offer a periodic current-awareness service and will conduct bibliographic searches on demand.

A two-semester graduate course, "The Information Base of Gerontology", will be part of the program. It will bring together students with various backgrounds and viewpoints. The literature of various gerontological problem areas is scattered; governmental sources play a significant role, and legal information for the public is one of the main themes. Understanding of and skills in this area will be essential for future professionals who work with information and gerontology. The teaching approach will integrate four phases: (a) review of theories and trends, (b) literature searches carried out in printed sources, and computerized data bases, (c) informal discussion meetings with agency personnel and members of senior centers, (d) dissemination of information packages to practitioners in various subject areas, e.g., transportation, or nutrition, housing and retirement. Feedback from agencies will be actively solicited in both informal and structured modes.

Thus the project integrates three components: research, service and education. Active involvement of students with service agencies has been planned from the beginning to alleviate "the lack of communication between the research and the practitioner which appeared to be related to attitudes formulated in academic and professional programs." (33)

Health Information Sharing Project (HISP)

Funded by the National Library of Medicine, HISP is examining and testing ways to facilitate the flow of health information in a community. The main objectives of the project are (1) experimental development of a decentralized information sharing mechanism, and (2) empirical evaluation of HISP in terms of benefits to the participating organizations as well as its potential problems. Each organization has been asked to designate one or two staff members as "information gatekeepers", who will be the active links in the information sharing network. We defined "information sharing" as the cooperative identification and utilization of the kinds of health data and information in a community that are not currently available through medical libraries and other formal information systems. These include mainly in-house reports and data files produced by local agencies. Each information producer is also a user. Both rely on informal channels of disseminating and obtaining this unique information.

Research on health information covers such a vast and complex area that a rigorous conceptualization of research problems and issues was essential before starting the literature search. It was our premise that health planning could be supported and enhanced by a new mode of access to health-related data. The literature of legislation, policy trends and problems of

health planning needed consideration because they formed the larger context of our specific focus on information. We studied the development, passage and provisions of the National Health Planning and Resources Development Act of 1974 (P.L. 93-641) and the Health Information Act of 1976 (P.L. 94-317). Each of these measures had implications for a different kind of health information: the first one related to planning data, health indicators, and the role of technical and social intelligence in the planning and decision making process. The latter one, an amendment of the Public Health Service Act, was concerned with health information for the public, health promotion, awareness of preventive health services, and education in the use of health care. Almost each health-related organization in a community produces both types of information. Because health organizations usually disseminate information to the public in the form of brochures, booklets, films, and other media, we decided that HISP should emphasize planning, management and research information.

Once this decision concerning the type of information was made, we began to investigate various kinds of information facilities in the health field. We collected literature about and made personal contacts with three types of facilities: (1) information and referral services, (2) management information systems, and (3) health and medical libraries. (Figure 4) It became clear that there is very little interaction between these different types of facilities. The professional staff of each live in their own world, have their own literature and media and attend their own meetings and workshops. The fact that each type of information facility deals with a different kind of clientele and information product and uses different processes and technologies, only underscores the need for more cooperation. It is hoped that HISP will catalyze this interaction and focus attention on issues in health

information, such as confidentiality, federal and state sunshine laws, or the value and cost of information products.

HISP proposes to accomplish this by its four principal functions. It has been mandated to (1) identify and inventory various types of planning, management and research information produced by local health-related agencies, (2) determine location and forms of information and data and the terms of their use, (3) construct and disseminate a directory of non-proprietary data resources and disseminate it to health organizations and (4) bring together in a series of workshops key information personnel (gatekeepers), from health organizations to facilitate interaction and to assist in information utilization techniques.

The impact of the gatekeepers, the directory of resources and the workshop component will be evaluated by a field experiment .

Are Human Resource Networks Realistic?

The research projects I have described are in the first year of their operation. We are very far from making any generalizations on the role of human resource networks in gerontology and community health planning. However, our contacts with decision makers, service personnel and researchers already has revealed certain patterns and trends which indicate a need for a new type of information practitioner. Ideally, this new professional should be part gatekeeper, providing linkage with information sources, and part information counselor, facilitating research utilization. We don't know whether a centralized or decentralized system will be the most favorable environment for interpersonal information transfer. Where interagency referrals are concerned (referral to an information source, data base, organization or individual), problems of data transfer, modes of feedback, and structure of

fees, if any, are still unsolved. These are all questions to pose in relation to a more realistic view of the role of human resource networks.

It is already apparent, however, that the diversity of institutional objectives and relationships in an interdisciplinary area render the communication of information from one agency to another a formidable task. The proliferation and complexity of such services and a general lack of adequate funding will not allow costly changes in the present structure. Therefore, the potential use of informal resources is the most challenging of the research questions we have posed for the project.

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